

Translation

PATENT COOPERATION TREATY

PCT/DE2003/001064



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INTERNATIONAL PRELIMINARY EXAMINATION REPORT

(PCT Article 36 and Rule 70)

Applicant's or agent's file reference 2002P05718WO	FOR FURTHER ACTION See Notification of Transmittal of International Preliminary Examination Report (Form PCT/IPEA/416)	
International application No. PCT/DE2003/001064	International filing date (<i>day/month/year</i>) 01 April 2003 (01.04.2003)	Priority date (<i>day/month/year</i>) 09 April 2002 (09.04.2002)
International Patent Classification (IPC) or national classification and IPC H04Q 7/38		
Applicant SIEMENS AKTIENGESELLSCHAFT		

1. This international preliminary examination report has been prepared by this International Preliminary Examining Authority and is transmitted to the applicant according to Article 36.
2. This REPORT consists of a total of <u>6</u> sheets, including this cover sheet. <input checked="" type="checkbox"/> This report is also accompanied by ANNEXES, i.e., sheets of the description, claims and/or drawings which have been amended and are the basis for this report and/or sheets containing rectifications made before this Authority (see Rule 70.16 and Section 607 of the Administrative Instructions under the PCT). These annexes consist of a total of _____ sheets.
3. This report contains indications relating to the following items: I <input checked="" type="checkbox"/> Basis of the report II <input type="checkbox"/> Priority III <input type="checkbox"/> Non-establishment of opinion with regard to novelty, inventive step and industrial applicability IV <input type="checkbox"/> Lack of unity of invention V <input checked="" type="checkbox"/> Reasoned statement under Article 35(2) with regard to novelty, inventive step or industrial applicability; citations and explanations supporting such statement VI <input type="checkbox"/> Certain documents cited VII <input type="checkbox"/> Certain defects in the international application VIII <input type="checkbox"/> Certain observations on the international application

Date of submission of the demand 29 August 2003 (29.08.2003)	Date of completion of this report 21 July 2004 (21.07.2004)
Name and mailing address of the IPEA/EP Facsimile No.	Authorized officer Telephone No.

INTERNATIONAL PRELIMINARY EXAMINATION REPORT

International application No.

PCT/DE2003/001064

I. Basis of the report

1. With regard to the elements of the international application:*

- ☐ the international application as originally filed
- ☒ the description:
pages _____ 1-21 _____, as originally filed
pages _____, filed with the demand
pages _____, filed with the letter of _____
- ☒ the claims:
pages _____, as originally filed
pages _____, as amended (together with any statement under Article 19
pages _____, filed with the demand
pages _____ 1-15 _____, filed with the letter of _____ 24 June 2004 (24.06.2004)
- ☒ the drawings:
pages _____ 1/2-2/2 _____, as originally filed
pages _____, filed with the demand
pages _____, filed with the letter of _____
- ☐ the sequence listing part of the description:
pages _____, as originally filed
pages _____, filed with the demand
pages _____, filed with the letter of _____

2. With regard to the **language**, all the elements marked above were available or furnished to this Authority in the language in which the international application was filed, unless otherwise indicated under this item.

These elements were available or furnished to this Authority in the following language _____ which is:

- ☐ the language of a translation furnished for the purposes of international search (under Rule 23.1(b)).
- ☐ the language of publication of the international application (under Rule 48.3(b)).
- ☐ the language of the translation furnished for the purposes of international preliminary examination (under Rule 55.2 and/or 55.3).

3. With regard to any **nucleotide and/or amino acid sequence** disclosed in the international application, the international preliminary examination was carried out on the basis of the sequence listing:

- ☐ contained in the international application in written form.
- ☐ filed together with the international application in computer readable form.
- ☐ furnished subsequently to this Authority in written form.
- ☐ furnished subsequently to this Authority in computer readable form.
- ☐ The statement that the subsequently furnished written sequence listing does not go beyond the disclosure in the international application as filed has been furnished.
- ☐ The statement that the information recorded in computer readable form is identical to the written sequence listing has been furnished.

4. ☐ The amendments have resulted in the cancellation of:

- ☐ the description, pages _____
- ☐ the claims, Nos. _____
- ☐ the drawings, sheets/fig _____

5. ☐ This report has been established as if (some of) the amendments had not been made, since they have been considered to go beyond the disclosure as filed, as indicated in the Supplemental Box (Rule 70.2(c)).**

* Replacement sheets which have been furnished to the receiving Office in response to an invitation under Article 14 are referred to in this report as "originally filed" and are not annexed to this report since they do not contain amendments (Rule 70.16 and 70.17).

** Any replacement sheet containing such amendments must be referred to under item 1 and annexed to this report.

INTERNATIONAL PRELIMINARY EXAMINATION REPORT

International application No.
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V. Reasoned statement under Article 35(2) with regard to novelty, inventive step or industrial applicability; citations and explanations supporting such statement

1. Statement

Novelty (N)	Claims	1-15	YES
	Claims		NO
Inventive step (IS)	Claims	1-15	YES
	Claims		NO
Industrial applicability (IA)	Claims	1-15	YES
	Claims		NO

2. Citations and explanations

Reference is made to the following documents:

D1: WO 98 25392 A

D2: ETSI TS 123 140 V3.0.1 (2000-03); Technical Specification: Universal Mobile Telecommunication System (UMTS); Multimedia Messaging Service (MMS); Functional description; Stage 2 (3G TS 23.140 version 3.0.1 Release 1999)

D3: Wireless Application Protocol; WAP-209-MMSEncapsulation-20020105-a; Version 05-Jan-2002.

1. The present **invention** relates to a **method** for transmitting data, in particular with multimedia content, from a first communications unit to a second communications unit in a communications network and in a **network system** as per the features of the preamble of **claims 1 and 12**.

2. If a first communications unit sends a multimedia message (MM) to a second communications unit via a network system, said MM is first stored in the

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network system. Usually, the MM is provided with a validity period and, when this has expired, the MM is downloaded by the second communications unit. Different methods for transmitting MMs are known in the prior art.

In document D1, an MM is first sent from a first communications unit to a network system where it is verified that a predetermined retrieval condition has been satisfied. If said condition has not been satisfied, a transmission status message, to the effect that the MM cannot be delivered, is sent from the network system to the first communications unit.

Documents D2 (paragraph 7) and D3 (paragraphs 6.5 and 7.2.23), cited by the applicant, represent the prior art in the ETSI and the WAP Forum bodies responsible for standardisation. According to said documents, the message "M-Delivery.ind" from the network system informs the first communications unit of the status of the MM transmission. The following states are defined: retrieved; rejected; deferred; unrecognised; expired.

3. A substantial disadvantage of the present classification by state is that, if the "time expired" state is returned, the first communications unit is not aware whether the second communications unit has intentionally failed to download the transmitted MM from the network system or whether the MM could not be delivered merely because the second communications unit was unobtainable within the validity period.

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4. The **problem** addressed by the present invention is that of informing the first communications unit in the latter event.
5. The problem is **solved** by means of a **method** for transmitting data, in particular with multimedia content, from a first communications unit to a second communications unit in a communications network **and** in a **network system**, as per the features of the characterising part of **claims 1 and 12**.

According to the **invention** the data sent is "undeliverable" if "good" reception of the transmitted data, or of a retrieval information report concerning the data to be sent to the second communications unit, is not acknowledged by the second communications unit by means of an appropriate confirmatory notification.

6. The present **invention** is **advantageous** in that the first communications unit is thereby assisted in deciding whether the MM in question should be resent with a longer validity period to ensure that it reaches the second communications unit.
7. The subject matter of the present invention is not disclosed in, or obvious from, the **documents cited in the international search report**.
8. The subject matter of **independent claims 1 and 12** is therefore considered to be **novel** and to **involve an inventive step** (PCT Article 33(2) and (3)).

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9. Claims 2 to 11 and 13 to 15 are dependent on claims 1 and 12 and therefore likewise satisfy the requirements of PCT Article 33(2) and (3) in respect of novelty and inventive step (PCT Article 33(4)).
10. The present invention is industrially applicable (PCT Article 33(4)).

Miscellaneous:

Pursuant to PCT Rule 5.1(a)(ii), the introductory part of the description should have cited document D1, said document being relevant prior art for the purpose of the present application, and briefly outlined the relevant prior art contained in D1.

Patent Claims

1. A method for transmitting data, particularly having multimedia contents, from a first communications unit (10; 110) to a second communications unit (40; 114) in a telecommunications network (10, 20, 30, 40; 110, 112, 114), whereby at least one transmission status message (M-Delivery.ind) assigned to the data is transmitted to the first communications unit (10; 110),
c h a r a c t e r i z e d b y t h e f a c t
that in the event of the non-deliverability of the data to the second communications unit (40; 114), an item of information concerning the non-deliverability of the sent data is provided in the transmission status message (M-Delivery.ind).
2. A method as claimed in Claim 1,
c h a r a c t e r i z e d b y t h e f a c t
that the item of information concerning the non-deliverability of the sent data is provided in the transmission status message (M-Delivery.ind) if the data cannot be delivered to the second communications unit (40; 114) within a definable period of validity.
3. A method as claimed in Claim 1 or 2,
c h a r a c t e r i z e d b y t h e f a c t
that non-deliverability of the data sent applies if the correct receipt of the data sent and/or of a recipient notification message (M-Notification.ind) concerning the data to be transmitted to the second communications unit (40; 114) is not acknowledged by the second communications unit (40; 114) by means of a respective

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associated confirmation message (M-NotifyResp.ind, M-Acknowledge.ind).

4. A method as claimed in one of Claims 1 to 3,
5 c h a r a c t e r i z e d b y t h e f a c t
that the telecommunications network (10, 20, 30, 40; 110, 112, 114)
comprises a switching arrangement (20, 30, 112) by way of which the
data is transmitted from the first communications unit (10, 110) to
10 the second (40, 114), whereby the switching arrangement (20, 30,
112) establishes the non-deliverability of the data sent and sends
the transmission status message (M-Delivery.ind) to the first
communications unit (10, 110).

5. A method as claimed in Claim 1 or 4,
15 c h a r a c t e r i z e d b y t h e f a c t
that the data is transmitted by means of the "Multimedia Messaging
Service" (MMS) by using the "Wireless Application Protocol" (WAP).

6. A method as claimed in Claim 5,
20 c h a r a c t e r i z e d b y t h e f a c t
that the recipient notification message (M-notification.ind)
comprises an MMS message in the category "X-Mms-Message-Type: m-
notification.ind".

25 7. A method as claimed in Claim 5 or 6,
c h a r a c t e r i z e d b y t h e f a c t
that the data is transmitted to the recipient by means of at least
one MMS message in the category "X-Mms-Message-Type: m-retrieve-
conf".

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8. A method as claimed in one of Claims 5 to 7,
characterized by the fact
that the transmission status message (M-Delivery.ind) comprises an
MMS message in the category "X-Mms-Message-Type: m-delivery-ind".

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9. A method as claimed in Claim 8,
characterized by the fact
that the item of information concerning the non-deliverability of
the data sent is represented by the value "<Octet 133>" in the data
field "X-Mms-Status" of the transmission status message (M-
delivery.ind).

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10. A method as claimed in one of Claims 1 to 9,
characterized by the fact
that the first telecommunications unit (10; 110) and/or the second
(40; 114) comprises a mobile communication module.

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11. A method as claimed in one of Claims 1 to 10,
characterized by the fact
that the telecommunications network (10, 20, 30, 40; 110, 112, 114)
is realized as a mobile communication network at least in areas and
the first communications unit (10; 110) and/or the second (40; 114)
operate(s) as defined by the GSM, GPRS, EDGE and/or UMTS standards.

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12. A switching arrangement (20, 30; 112) for transmitting data in a
telecommunications network (10, 20, 30, 40; 110, 112, 114),
particularly according to a method defined by one of the foregoing
claims, from a first communications unit (10; 110) to a second
communications unit (40; 114), whereby

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the switching arrangement (20, 30; 112) comprises an apparatus for

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producing a transmission status message which is assigned to the data to be transmitted to the second communications unit (40; 114), characterized by the fact

5 that the apparatus for producing the transmission status message provides an item of information concerning the non-deliverability of the data to be transmitted in the transmission status message (M-Delivery.ind) if the data cannot be delivered to the second communications unit (40; 114).

10 13. A switching arrangement as claimed in Claim 12, characterized by the fact that the apparatus for producing the transmission status message provides the item of information concerning the non-deliverability of the data to be transmitted in the transmission status message (M-Delivery.ind) if the data cannot be delivered to the second
15 communications unit (40; 114) within a definable period of validity.

14. A switching arrangement as claimed in Claim 12 or 13, characterized by the fact
20 that with regard to the apparatus for producing the transmission status message, non-deliverability of the data sent applies if the correct receipt of the data sent and/or of a recipient notification message (M-Notification.ind) concerning the data to be transmitted to the second communications unit (40; 114) is not acknowledged by
25 the second communications unit (40; 114) by means of a respective associated confirmation message (M-NotifyResp.ind, M-Acknowledge.ind).

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15. A switching arrangement as claimed in one of Claims 12 to 14,
c h a r a c t e r i z e d b y t h e f a c t
that the switching arrangement (20, 30; 112) comprises an apparatus
for transmitting the transmission status message to the first
5 communications unit (10; 110)

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